

SEQUENCE LISTING

#9

(1) GENERAL INFORMATION:

(i) APPLICANT: (Other than US) INTERNATIONAL DIABETES INSTITUTE and
DEAKIN UNIVERSITY
(US only) G. COLLIER and P.Z. ZIMMET

(ii) TITLE OF INVENTION: A NOVEL GENE AND USES THEREFOR

(iii) NUMBER OF SEQUENCES: 14

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: DAVIES COLLISON CAVE
(B) STREET: 1 LITTLE COLLINS STREET
(C) CITY: MELBOURNE
(D) STATE: VICTORIA
(E) COUNTRY: AUSTRALIA
(F) ZIP: 3000

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: PCT INTERNATIONAL
(B) FILING DATE: 30-OCT-1998
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: PP0117/97
(B) FILING DATE: 31-OCT-1997
(C) CLASSIFICATION:

(viii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: PP0323/97
(B) FILING DATE: 11-NOV-1997
(C) CLASSIFICATION:

(ix) ATTORNEY/AGENT INFORMATION:

(A) NAME: HUGHES, DR E JOHN L
(C) REFERENCE/DOCKET NUMBER: EJH/AF

(x) TELECOMMUNICATION INFORMATION:

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(C) TELEX: AA 31787

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 342 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(ix) FEATURE:

(A) NAME/KEY: CDS
(B) LOCATION: 29..247

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FEB 12 2001

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FEB 14 2001

OFFICE OF PETITIONS

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GTTCCAGGAG ATTACAGCTC CAGCCACA ATG ATT GAG GTG GTT TGC AAC GAC	52
Met Ile Glu Val Val Cys Asn Asp	
1 5	
CGT CTA GGA AAG AAA GTC CGC GTT AAG TGC AAC ACC GAT GAC ACC ATC	100
Arg Leu Gly Lys Lys Val Arg Val Lys Cys Asn Thr Asp Asp Thr Ile	
10 15 20	
GGG GAC TTG AAG AAA CTG ATA GCG GCC CAA ACT GGC ACT CGT TGG AAT	148
Gly Asp Leu Lys Lys Leu Ile Ala Ala Gln Thr Gly Thr Arg Trp Asn	
25 30 35 40	
AAG ATC GTT CTT AAA AAG TGG TAC ACG ATT TTT AAG GAC CAT GTA TCT	196
Lys Ile Val Leu Lys Lys Trp Tyr Thr Ile Phe Lys Asp His Val Ser	
45 50 55	
CTG GGA GAT TAT GAA ATC CAC GAT GGG ATG AAC CTG GAG CTT TAT TAC	244
Leu Gly Asp Tyr Glu Ile His Asp Gly Met Asn Leu Glu Leu Tyr Tyr	
60 65 70	
CAG TAGAGGGGAA TTCCTCCACC TTGCCAACC TTGCTTCCT CTCCCATGGC	297
Gln	
TCATTTAACCA CTGTTGTAGA TGCTCATTTT TTTGTTAACGT GTACT	342

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 73 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Arg Val	
1 5 15	
Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala	
20 25 30	
Ala Gln Thr Gly Thr Arg Trp Asn Lys Ile Val Leu Lys Lys Trp Tyr	
35 40 45	
Thr Ile Phe Lys Asp His Val Ser Leu Gly Asp Tyr Glu Ile His Asp	
50 55 60	
Gly Met Asn Leu Glu Leu Tyr Tyr Gln	
65 70	

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

ATGTTCAACA CAGCAGCCAT CCAAGGTCTT CTAATGTCGA GGTGGTGTT ACTAACTCCA	60
CCAAACGTTG CTGGCAGATC CTTTCTTCA GGCGCAATTAC ACGTTGTGGC TACTGTGGTA	120
GCCCCTGAAC TTCTTGACT ATCGCCGGGT TTGACCGTGA GCAACCTTAT TCTAGCAAGA	180
ATTTTCACC ATGTGCTAAA AATTCCCTGGT ACATAGAGAC CCTCTAATAC TTTAGGTGCT	240
ACCCTACTTG GACCTCGAAA TAATGGTCAT CTCCCCTTAA GGAGGTGGAA CGGGTTGGAA	300
CGAAAGGAGA GGGTACCGAG TAAATTGTGA CAACATCTAC GAGTAAAAAA ACAATTACACA	360
TGAATAAAAAA CTTTGATGCT GCAAAAAAAAA A	391

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 16 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

AAGCTTTTTT TTTTTG	16
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(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

AAGCTTCGGG TAA	13
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(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

AGTCCCGCGTT AAGTGCAACA

20

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

CTCCAGGTTC ATCCCATCGT

20

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 20 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

GGCTACAGCT TCACCACCAC

20

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

GCTTGCTGAT CCACATCTGC

20

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

TGGTAATAAA GCTCCAGGTTC CATCCCATCG

30

(2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

CAAACCTGGCA CTCGTTGGAA

20

(2) INFORMATION FOR SEQ ID NO:12:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 19 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GTTGGGCAAG GTGGAGGAA

19

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (ix) FEATURE:
 - (A) NAME/KEY: CDS
 - (B) LOCATION: 1..102
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

ATG ATC GAG GTT GTT TGC AAC GAC CGT CTG GGG AAA AAG GTC CNC GTT
Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Xaa Val
1 5 10 15

48

AAA TGC AAC ACG GAT GAT ACC ATC GGG GAC CTT AAG AAG CTG ATT GCA
Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala
20 25 30

96

GCC
102
Ala *

TAA

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 33 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Met Ile Glu Val Val Cys Asn Asp Arg Leu Gly Lys Lys Val Xaa Val
1 5 10 15

Lys Cys Asn Thr Asp Asp Thr Ile Gly Asp Leu Lys Lys Leu Ile Ala
20 25 30

Ala